

TREC-IS 2019-B Notebook Evaluator v2.3
Run: DLR_BERT_R (DLR_BERT_R)

EVALUATION: Alertng Performance
Overall performance

```
> High Importance Alert Worth: -0.9614678899082575  
> Low Importance Alert Worth: -0.00032056621101936154  
> Accumulated Alert Worth: -0.48089422805963844
```

EVALUATION: Information Type Categorization
Overall performance

```
> Information Type Precision (positive class, multi-type, macro): 0.28023222057342534  
> Information Type Recall (positive class, multi-type, macro): 0.18738361647580193  
> Information Type F1 (positive class, multi-type, macro): 0.19895364658641745  
> Information Type Accuracy (overall, multi-type, macro): 0.8560155490767734  
> High Importance Information Type Precision (positive class, multi-type, macro): 0.15558862433862433  
> High Importance Information Type Recall (positive class, multi-type, macro): 0.07582212184332014  
> High Importance Information Type F1 (positive class, multi-type, macro): 0.09975680698727141  
> High Importance Information Type Accuracy (overall, multi-type, macro): 0.9681639851707878  
> Low Importance Information Type Precision (positive class, multi-type, macro): 0.31959335622652035  
> Low Importance Information Type Recall (positive class, multi-type, macro): 0.22261356214921718  
> Low Importance Information Type F1 (positive class, multi-type, macro): 0.23027896435456885  
> Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8206002534681375
```

EVALUATION: Information Priority Level
Overall Performance

```
> Priority Estimation Error (mean squared error, macro): 0.10194340212487817  
> Priority Estimation Error High Importance (mean squared error, macro): 0.18336337438653252  
> Priority Estimation Error Low Importance (mean squared error, macro): 0.07623183193698731
```

LATEX

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DLR_BERT_R & -0.9615 & -0.4809 & 0.0998 & 0.1113 & 0.8560 & 0.1834 & 0.1019 \\
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EVALUATION: Information Type Categorization (Multi-type)
Per Event Performance

albertaWildfires2019

Information Type Precision (positive class, multi-type, macro): 0.2862927742584958
Information Type Recall (positive class, multi-type, macro): 0.21531782758490195
Information Type F1 (positive class, multi-type, macro): 0.21565232719622277
Information Type Accuracy (overall, multi-type, macro): 0.8512199999999999
High Importance Information Type Precision (positive class, multi-type, macro): 0.1607669505552379
High Importance Information Type Recall (positive class, multi-type, macro): 0.11238529424288878
High Importance Information Type F1 (positive class, multi-type, macro): 0.11688249625074897
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9610833333333334
Low Importance Information Type Precision (positive class, multi-type, macro): 0.3259325080595246
Low Importance Information Type Recall (positive class, multi-type, macro): 0.24782283811395875
Low Importance Information Type F1 (positive class, multi-type, macro): 0.2468428001263724
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8165263157894738

cycloneKenneth2019

Information Type Precision (positive class, multi-type, macro): 0.24406669359842958
Information Type Recall (positive class, multi-type, macro): 0.1421368438255337
Information Type F1 (positive class, multi-type, macro): 0.14154251755448335
Information Type Accuracy (overall, multi-type, macro): 0.832256128064032
High Importance Information Type Precision (positive class, multi-type, macro): 0.1313614554732784
High Importance Information Type Recall (positive class, multi-type, macro): 0.05921170832514044
High Importance Information Type F1 (positive class, multi-type, macro): 0.07861818602109864
High Importance Information Type Accuracy (overall, multi-type, macro): 0.939052859763215
Low Importance Information Type Precision (positive class, multi-type, macro): 0.2796578214274246
Low Importance Information Type Recall (positive class, multi-type, macro): 0.16832372872039475
Low Importance Information Type F1 (positive class, multi-type, macro): 0.1614133590913417
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.79853084436953

philippinesEarthquake2019

Information Type Precision (positive class, multi-type, macro): 0.1912239839334406
Information Type Recall (positive class, multi-type, macro): 0.15941267814144355
Information Type F1 (positive class, multi-type, macro): 0.14254814751090136
Information Type Accuracy (overall, multi-type, macro): 0.8834085213032581
High Importance Information Type Precision (positive class, multi-type, macro): 0.06754385964912281
High Importance Information Type Recall (positive class, multi-type, macro): 0.0525252525252523
High Importance Information Type F1 (positive class, multi-type, macro): 0.0544150110375276
High Importance Information Type Accuracy (overall, multi-type, macro): 0.976608187134503
Low Importance Information Type Precision (positive class, multi-type, macro): 0.2302808652863831
Low Importance Information Type Recall (positive class, multi-type, macro): 0.19316660202024072
Low Importance Information Type F1 (positive class, multi-type, macro): 0.17037966429196674
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8539770478828651

coloradoStemShooting2019

Information Type Precision (positive class, multi-type, macro): 0.12924465423669765
Information Type Recall (positive class, multi-type, macro): 0.11578657790145176
Information Type F1 (positive class, multi-type, macro): 0.09524249549622196
Information Type Accuracy (overall, multi-type, macro): 0.8728974979822438
High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9958299704062415
Low Importance Information Type Precision (positive class, multi-type, macro): 0.17005875557460215
Low Importance Information Type Recall (positive class, multi-type, macro): 0.15235076039664705
Low Importance Information Type F1 (positive class, multi-type, macro): 0.12531907302134468
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8340767172167707

southAfricaFloods2019

Information Type Precision (positive class, multi-type, macro): 0.2655773118032603
Information Type Recall (positive class, multi-type, macro): 0.19385692678214667
Information Type F1 (positive class, multi-type, macro): 0.17218692190185542
Information Type Accuracy (overall, multi-type, macro): 0.8717865085248332
High Importance Information Type Precision (positive class, multi-type, macro): 0.07766367137355584
High Importance Information Type Recall (positive class, multi-type, macro): 0.02781131771713757
High Importance Information Type F1 (positive class, multi-type, macro): 0.03570460704607046
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9707190511489993
Low Importance Information Type Precision (positive class, multi-type, macro): 0.32491846141264064
Low Importance Information Type Recall (positive class, multi-type, macro): 0.24629238227636008
Low Importance Information Type F1 (positive class, multi-type, macro): 0.21528660027736649
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.8405446529593071

sandiegoSynagogueShooting2019

Information Type Precision (positive class, multi-type, macro): 0.2642191908593182
Information Type Recall (positive class, multi-type, macro): 0.11034168095195686
Information Type F1 (positive class, multi-type, macro): 0.11131246352916309
Information Type Accuracy (overall, multi-type, macro): 0.7974668630338733

High Importance Information Type Precision (positive class, multi-type, macro): 0.0
High Importance Information Type Recall (positive class, multi-type, macro): 0.0
High Importance Information Type F1 (positive class, multi-type, macro): 0.0
High Importance Information Type Accuracy (overall, multi-type, macro): 0.9943544428080511
Low Importance Information Type Precision (positive class, multi-type, macro): 0.3476568300780503
Low Importance Information Type Recall (positive class, multi-type, macro): 0.1451864223052064
Low Importance Information Type F1 (positive class, multi-type, macro): 0.14646376780153036
Low Importance Information Type Accuracy (overall, multi-type, macro): 0.7352918378420278

EVALUATION: Information Type Categorization (Multi-type)
Per Information Type Performance

Request-GoodsServices

	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	9223
Request-GoodsServices	0.00	0.00	0.00	38
micro avg	0.99	0.99	0.99	9261
macro avg	0.50	0.50	0.50	9261
weighted avg	0.99	0.99	0.99	9261

Request-SearchAndRescue

	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	9252
Request-SearchAndRescue	0.00	0.00	0.00	9
micro avg	1.00	1.00	1.00	9261
macro avg	0.50	0.50	0.50	9261
weighted avg	1.00	1.00	1.00	9261

Request-InformationWanted

	precision	recall	f1-score	support
Other Classes	1.00	0.99	1.00	9228
Request-InformationWanted	0.09	0.18	0.12	33
micro avg	0.99	0.99	0.99	9261
macro avg	0.54	0.59	0.56	9261
weighted avg	0.99	0.99	0.99	9261

CallToAction-Volunteer

	precision	recall	f1-score	support
Other Classes	1.00	1.00	1.00	9237
CallToAction-Volunteer	0.07	0.04	0.05	24
micro avg	1.00	1.00	1.00	9261
macro avg	0.53	0.52	0.52	9261
weighted avg	1.00	1.00	1.00	9261

CallToAction-Donations

	precision	recall	f1-score	support
Other Classes	0.99	1.00	0.99	9155
CallToAction-Donations	0.34	0.20	0.25	106
micro avg	0.99	0.99	0.99	9261
macro avg	0.67	0.60	0.62	9261
weighted avg	0.98	0.99	0.98	9261

CallToAction-MovePeople

	precision	recall	f1-score	support
Other Classes	0.99	1.00	0.99	9158
CallToAction-MovePeople	0.35	0.17	0.23	103
micro avg	0.99	0.99	0.99	9261
macro avg	0.67	0.58	0.61	9261
weighted avg	0.98	0.99	0.99	9261

Report-FirstPartyObservation

	precision	recall	f1-score	support
Other Classes	0.97	0.93	0.95	8942
Report-FirstPartyObservation	0.08	0.17	0.11	319
micro avg	0.90	0.90	0.90	9261
macro avg	0.53	0.55	0.53	9261
weighted avg	0.94	0.90	0.92	9261

Report-ThirdPartyObservation		precision	recall	f1-score	support
Report-ThirdPartyObservation	Other Classes	0.84	0.80	0.82	7785
Report-ThirdPartyObservation		0.14	0.16	0.15	1476
	micro avg	0.70	0.70	0.70	9261
	macro avg	0.49	0.48	0.48	9261
	weighted avg	0.72	0.70	0.71	9261
Report-Weather		precision	recall	f1-score	support
Report-Weather	Other Classes	0.91	0.97	0.94	8123
Report-Weather		0.65	0.35	0.45	1138
	micro avg	0.90	0.90	0.90	9261
	macro avg	0.78	0.66	0.70	9261
	weighted avg	0.88	0.90	0.88	9261
Report-Location		precision	recall	f1-score	support
Report-Location	Other Classes	0.48	0.99	0.64	4351
Report-Location		0.82	0.04	0.08	4910
	micro avg	0.49	0.49	0.49	9261
	macro avg	0.65	0.52	0.36	9261
	weighted avg	0.66	0.49	0.34	9261
Report-EmergingThreats		precision	recall	f1-score	support
Report-EmergingThreats	Other Classes	0.94	0.95	0.95	8621
Report-EmergingThreats		0.20	0.15	0.17	640
	micro avg	0.90	0.90	0.90	9261
	macro avg	0.57	0.55	0.56	9261
	weighted avg	0.89	0.90	0.89	9261
Report-NewSubEvent		precision	recall	f1-score	support
Report-NewSubEvent	Other Classes	0.98	1.00	0.99	9051
Report-NewSubEvent		0.02	0.00	0.01	210
	micro avg	0.97	0.97	0.97	9261
	macro avg	0.50	0.50	0.50	9261
	weighted avg	0.96	0.97	0.96	9261
Report-MultimediaShare		precision	recall	f1-score	support
Report-MultimediaShare	Other Classes	0.64	0.87	0.74	5719
Report-MultimediaShare		0.50	0.20	0.29	3542
	micro avg	0.62	0.62	0.62	9261
	macro avg	0.57	0.54	0.51	9261
	weighted avg	0.59	0.62	0.57	9261
Report-ServiceAvailable		precision	recall	f1-score	support
Report-ServiceAvailable	Other Classes	0.97	0.99	0.98	8916
Report-ServiceAvailable		0.36	0.13	0.19	345
	micro avg	0.96	0.96	0.96	9261
	macro avg	0.66	0.56	0.58	9261
	weighted avg	0.94	0.96	0.95	9261
Report-Factoid		precision	recall	f1-score	support

Other Classes	0.71	0.91	0.80	6019
Report-Factoid	0.64	0.31	0.42	3242
micro avg	0.70	0.70	0.70	9261
macro avg	0.68	0.61	0.61	9261
weighted avg	0.69	0.70	0.66	9261

Report-Official	precision	recall	f1-score	support
Other Classes	0.93	0.97	0.95	8486
Report-Official	0.30	0.14	0.20	775
micro avg	0.90	0.90	0.90	9261
macro avg	0.61	0.56	0.57	9261
weighted avg	0.87	0.90	0.88	9261

Report-News	precision	recall	f1-score	support
Other Classes	0.78	0.73	0.75	6421
Report-News	0.46	0.52	0.49	2840
micro avg	0.67	0.67	0.67	9261
macro avg	0.62	0.63	0.62	9261
weighted avg	0.68	0.67	0.67	9261

Report-CleanUp	precision	recall	f1-score	support
Other Classes	0.99	1.00	1.00	9201
Report-CleanUp	0.21	0.10	0.13	60
micro avg	0.99	0.99	0.99	9261
macro avg	0.60	0.55	0.57	9261
weighted avg	0.99	0.99	0.99	9261

Report-Hashtags	precision	recall	f1-score	support
Other Classes	0.78	0.88	0.83	6757
Report-Hashtags	0.51	0.33	0.40	2504
micro avg	0.73	0.73	0.73	9261
macro avg	0.65	0.61	0.62	9261
weighted avg	0.71	0.73	0.71	9261

Report-OriginalEvent	precision	recall	f1-score	support
Other Classes	0.91	0.90	0.91	8321
Report-OriginalEvent	0.20	0.22	0.21	940
micro avg	0.83	0.83	0.83	9261
macro avg	0.56	0.56	0.56	9261
weighted avg	0.84	0.83	0.84	9261

Other-ContextualInformation	precision	recall	f1-score	support
Other Classes	0.97	0.94	0.96	9014
Other-ContextualInformation	0.03	0.06	0.04	247
micro avg	0.91	0.91	0.91	9261
macro avg	0.50	0.50	0.50	9261
weighted avg	0.95	0.91	0.93	9261

Other-Advice	precision	recall	f1-score	support
Other Classes	0.97	0.98	0.98	8946
Other-Advice	0.32	0.26	0.29	315
micro avg	0.96	0.96	0.96	9261
macro avg	0.65	0.62	0.63	9261

weighted avg	0.95	0.96	0.95	9261
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Other-Sentiment				
	precision	recall	f1-score	support
Other Classes	0.96	0.79	0.87	8481
Other-Sentiment	0.21	0.61	0.32	780
micro avg	0.78	0.78	0.78	9261
macro avg	0.59	0.70	0.59	9261
weighted avg	0.89	0.78	0.82	9261

Other-Discussion				
	precision	recall	f1-score	support
Other Classes	0.95	0.93	0.94	8805
Other-Discussion	0.05	0.07	0.06	456
micro avg	0.88	0.88	0.88	9261
macro avg	0.50	0.50	0.50	9261
weighted avg	0.91	0.88	0.89	9261

Other-Irrelevant				
	precision	recall	f1-score	support
Other Classes	0.70	0.84	0.76	6224
Other-Irrelevant	0.44	0.25	0.32	3037
micro avg	0.65	0.65	0.65	9261
macro avg	0.57	0.55	0.54	9261
weighted avg	0.61	0.65	0.62	9261